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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,194	07/18/2003	Alexander G. MacInnis	17414US03	4045

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MCANDREWS HELD & MALLOY, LTD
500 WEST MADISON STREET
SUITE 3400
CHICAGO, IL 60661

EXAMINER	
BAUTISTA, XIOMARA L	

ART UNIT	PAPER NUMBER
2179	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/622,194

Applicant(s)

MACINNIS ET AL.

Examiner

X. L. Bautista

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/13/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-7, 9-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Cottle et al* (US 6,263,396 B1), *Dye* (US 6,108,014) and *Porter* (US 6,208,354 B1).**

Claims 1 and 11:

Cottle discloses a method and system having a window controller having the position of each window to be displayed; a plurality of windows can be overlapped and a priority encoder defines the display order on the screen (in a window controller, obtaining data that describes windows in which the graphics images are displayed; sorting the data using the window controller in accordance with respective depths of the windows; col. 127, lines 13-18); (col. 43, lines 25-40; col. 113, lines 41-67; col. 114, lines 1-20). **Cottle** teaches an on screen display

controller (OSD) that determines which display is viewable through attributes (window data); (col. 7, lines 59-60; col. 47, lines 25-35; col. 48, lines 3-8, 66-67; col. 49, lines 1-10). Cottle teaches transmission of header packets containing data describing windows (col. 24, lines 23-30; col. 74, lines 20-28). Cottle teaches blending graphics images using a blend factor (col. 114, lines 44-49; col. 124, lines 55-67; col. 125, lines 34-36).

Cottle does not specifically teach blending graphic images using alpha values associated with the graphics images. However, Dye discloses a system and method for simultaneously displaying a plurality of video data objects having different bit per pixel formats. Dye teaches a graphics controller that manipulates object information workspace memory areas corresponding to each object or window; the workspace areas specifying data types, color depths, depth values, alpha blending information, screen position, etc for each respective window or object on the screen (abstract; col. 5, lines 1-29). Dye teaches alpha blending and alpha values associated with the graphics images (col. 28, lines 4-17; col. 34, lines 22-39; col. 35, lines 5-20). Therefore, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to modify Cottle's invention to include Dye's teaching of blending graphics using alpha values because it enables users to combine at least two colors (pixels, images) allowing for transparency effects in computer graphics.

Cottle teaches a (TSP) transport packet parser (window controller) to process header packets for determining whether the packet should be discarded, processed, or stored if it contains relevant data; and an (OSD) on-screen display control (display engine) for mixing

graphics and video, but it does not specifically teach that the TSP transmits header packets, having window data, directly to the OSD. However, **Porter** discloses a system and method for storing and displaying multiple graphical images in a mixed video and graphics display (abstract). Porter discloses a display overlay engine (display engine) that reads graphics information stored in memory and blends it with one additional data display source to produce a display output signal. Porter explains that the graphics information fetched from memory includes one or more images, wherein the system determines which image will be fetched based on control information received from a controller (col. 2, lines 3-21, 39-52). Porter discloses graphics information stored within each image; the graphics information may be stored in a packed or planar format, wherein a packed format combines additional data with the graphics information used in the display (col. 3, lines 49-54, 64-67; col. 4, lines 1-18, 41-56); an example is the packing of alpha values for each of the pixels within the graphics image (col. 4, lines 65-67; col. 5, lines 9-44). Porter explains that the alpha value determines the level of translucence of the graphics images with respect to the video information that may be co-resident on the display with the graphics information. Porter illustrates in figure 1, a controller 40 that sends control information 46 directly to the display engine 30, which reads the graphics information and blends it with additional data to produce a display output 35 (col. 6, lines 18-28; col. 7, lines 6-16). Thus, it would have been obvious to a person having ordinary skill in the art at the time of invention to modify Cottle's invention to include Porter's teaching of a controller coupled to a display engine because it provides the graphics display system with a rapid and effective means

(controller) for classifying and sending relevant data to the display means for proper display of windows and for allowing graphics information to be blended and displayed in accordance with the windows location and the alpha values relating the graphics images, that is, the selected graphics images can be fetched one by one from memory and then blended with additional data to produce an output display without requiring a great deal of memory bandwidth resources.

Claims 2-4 and 12-14:

Cottle teaches data portions describing a corresponding window and sorting the data portions describing windows according to their depth. Dye teaches sorting data portion in an order from the upper most window to a lower most window; from a left most window to a right most window; from a back most window to a front most window (col. 6, lines 31-42; col. 12, lines 44-60; col. 18, lines 17-32-55; col. 24, lines 65-67; col. 25, lines 1-20; *col. 25, lines 64-67; col. 26, lines 1-20; col. 27, lines 15-45; col. 31, lines 43-65; col. 33, lines 12-22*).

Claims 5 and 15:

Dye teaches sorting data based on which windows have been processed on a current display line (col. 22, lines 10-24; 28-44; col. 31, lines 43-67; col. 32, lines 1-35).

Claims 6 and 16:

Dye teaches a depth number or value associated with each window; the value signifying its respective depth in comparison to other windows (col. 25, lines 28-38; col. 27, lines 15-31, 53-61).

Claims 7 and 17:

Dye teaches modification of the windows' priority (depth number), (col. 5, lines 47-55; col. 29, lines 24-67; col. 30, lines 1-11; col. 31, lines 43-67; col. 32, lines 1-35; col. 33, lines 12-22; col. 42, lines 63-67; col. 43, lines 1-30; col. 53, lines 46-64).

Claims 9 and 19:

Cottle/Dye teaches moving graphics images from memory to the display engine using direct memory access (Cottle: col. 9, lines 3-18; col. 10, lines 59-65; Dye: col. 3, lines 36-67; col. 11, lines 61-67; col. 12, lines 1-3; col. 15, lines 13-26).

Claims 10 and 20:

Dye teaches converting the graphics images format into a common format (col. 21, lines 43-55; col. 60, lines 30-40).

4. **Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottle/Dye/Porter and Odam et al (US 5,825,360).**

Claims 8 and 18:

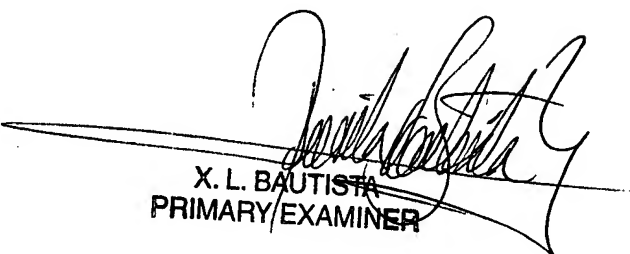
Cottle/Dye/Porter does not teach modifying the window's depth number by adding a predetermined value. However, **Odam** discloses a system and method for arranging windows in a workspace on a computer display screen (abstract; col. 3, lines 10-23). Odam teaches modifying the depth number of a window by adding a predetermined value (col. 7, lines 47-59; col. 8, lines 31-44). Thus, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify Cottle/Dye/Porter's invention to include Odam's teaching of changing a window's depth number by adding a predetermined value because every displayed window has a priority number compared to the other windows being displayed and this number must be increased or decreased once the windows priority changes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to X. L. Bautista whose telephone number is (571) 272-4132. The examiner can normally be reached on Monday-Thursday 8:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


X. L. BAUTISTA
PRIMARY EXAMINER

xlb
January 10, 2008